STATUS OF THE CLAIMS

1. (Cancelled)

2. (Previously Presented) A laser welding method, comprising:

varying a waveform and a frequency of a laser output in a controlled manner so as to prevent occurrence of weld defects;

detecting a time change in light emission strength of a plasma or a plume generated from a laser welded portion;

analyzing frequency characteristics of the light emission to obtain an amplitude of a frequency component which is a same variation frequency of the laser output; and

setting a laser output variation condition such as the waveform and the frequency so that the amplitude of the frequency component becomes a maximum.

3. (Previously Presented) A laser welding method, comprising:

varying a waveform and a frequency of a laser output in a controlled manner so as to prevent occurrence of weld defects;

detecting a time change in light emission strength of a plasma or a plume generated from a laser welded portion;

setting an arbitrary threshold value to the time change in the light emission strength of the plasma or the plume; and

setting a laser output variation condition so that a sum of time at which the light emission strength becomes the threshold value or less is a minimum,

wherein laser output variation condition is set such that the sum of the time at which the light emission strength becomes the threshold value or less is set to a range between 2ms to 12ms.

4. (Cancelled)

5. (Previously Presented) The laser welding method according to claim 2, further comprising:

setting an arbitrary threshold value to the time change in the light emission strength of the plasma or the plume, and

setting the laser output variation condition so that a sum of time at which the light emission strength becomes the threshold value or less is a minimum,

wherein laser output variation condition is set such that the sum of the time at which the light emission strength becomes the threshold value or less is set to a range between 2ms to 12 ms.

6-7. (Cancelled)